

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claim 13 has been canceled.

Claims 16 and 17 have been amended as follows:

1 16. (Amended) A semiconductor device ~~as claimed in claim 13, having a semiconductor~~

2 ~~chip,~~

3 first electrodes formed on said semiconductor chip,

4 barrier metals formed on said first electrodes and having laminated structures, and

5 a plurality of second protruded electrodes, which serve as external connection terminals,

6 formed on said barrier metals, wherein said barrier metals comprising:

7 a lowermost conductive metal layer laminated on said first electrodes, said lowermost

8 conductive metal layer having a joining property with said first electrodes;

9 an intermediate conductive metal layer laminated on said lowermost conductive metal

10 layer, said intermediate conductive metal layer comprising one or more layers and having a joining

11 property with said lowermost conductive metal layer, said intermediate conductive metal layer

12 having at least one layer serving as a barrier layer for preventing said protruded electrodes from

13 diffusing into said intermediate conductive metal layer; and

14 an uppermost conductive metal layer laminated on said one or more intermediate

15 conductive metal layers, said uppermost conductive metal layer being made of a material which

16 easily alloys with the material of said intermediate conductive metal layers and which has resistance
17 to oxidation,

18 wherein said uppermost conductive metal layer is made of a metal selected from the group
19 consisting of gold (Au), platinum (Pt), palladium (Pd), silver (Ag) and rhodium (Rh) or of an alloy
20 containing a metal selected from the group consisting of gold (Au), platinum (Pt), palladium (Pd),
21 silver (Ag) and rhodium (Rh).

17. (Amended) A semiconductor device as claimed in claim †3 16, wherein the weight of
said uppermost conductive metal layer is less than 2 weight % of the weight of the bump to be
formed thereon.